

# Optimizing User, Group, and Role Management with Access Control and Workflows

Category: ServiceNow System Administrator

Skills Required:

Tensorflow, Oracle DB

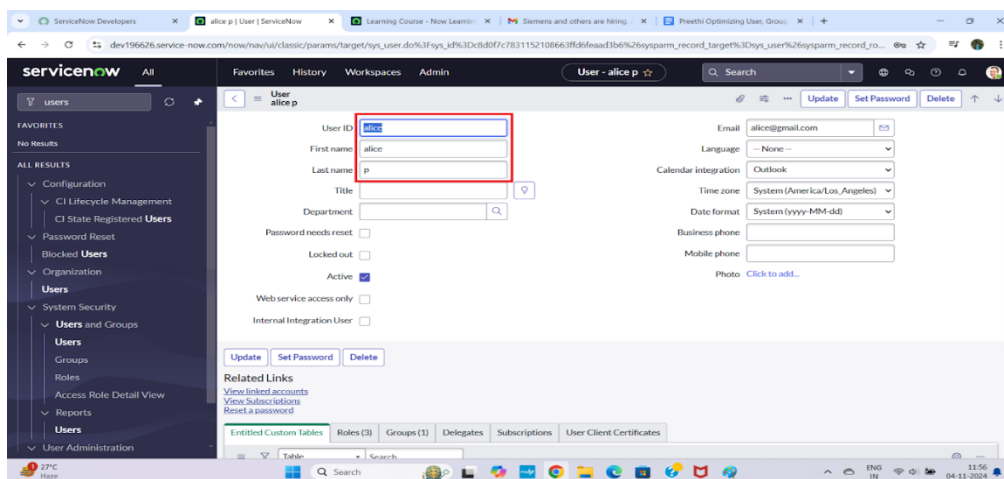
Project Description:

## Problem Statement:

In a small project management team consisting of a Project Manager (Alice) and a Team Member (Bob), there is a need to efficiently manage project tasks and ensure accountability throughout the project lifecycle. The current system lacks clear role definitions, access controls, and a structured workflow, leading to confusion regarding task assignments and progress tracking.

## Create Users

1. Open service now
2. Click on All >> search for users
3. Select Users under system security
4. Click on new



5. Fill the following details to create a new user
6. Click on submit
7. **Create one more user:**
8. Create another user with the following details
9. Click on submit

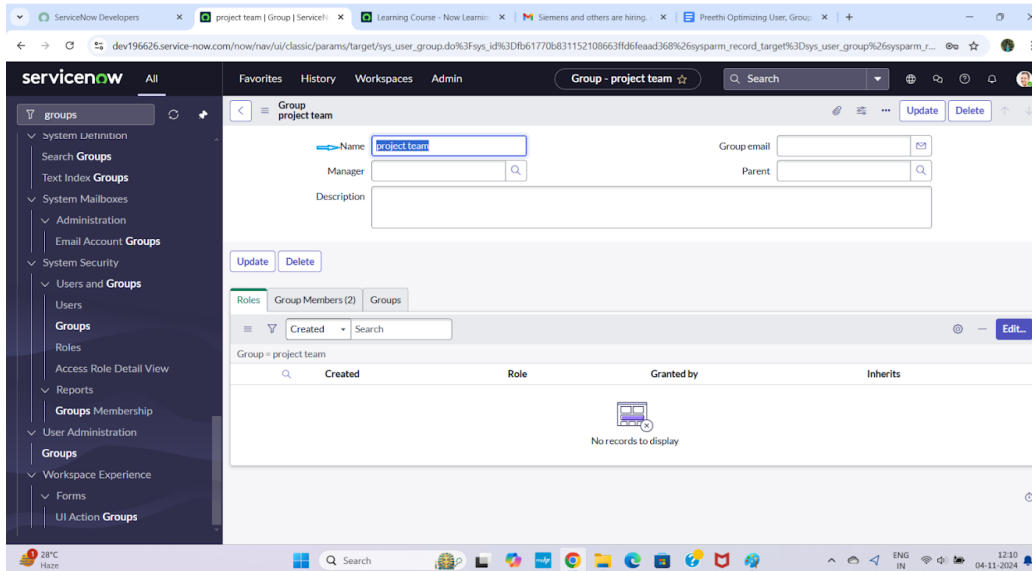
The screenshot shows the ServiceNow User Administration interface. The left sidebar contains a navigation menu with categories like Configuration, System Security, and User Administration. The main area displays the 'User - Bob p' form. The form fields are as follows:

- User ID:** bob (highlighted with a red box)
- First name:** Bob
- Last name:** p
- Title:** (empty)
- Department:** (empty)
- Password needs reset:** ☐
- Locked out:** ☐
- Active:** ☒
- Web service access only:** ☐
- Internal Integration User:** ☐
- Email:** bob@gmail.com
- Language:** -- None --
- Calendar integration:** Outlook
- Time zone:** System (America/Los\_Angeles)
- Date format:** System (yyyy-MM-dd)
- Business phone:** (empty)
- Mobile phone:** (empty)
- Photo:** Click to add...

At the bottom of the form, there are buttons for 'Update', 'Set Password', and 'Delete'. Below the form, there are 'Related Links' and a section for 'Entitled Custom Tables'.

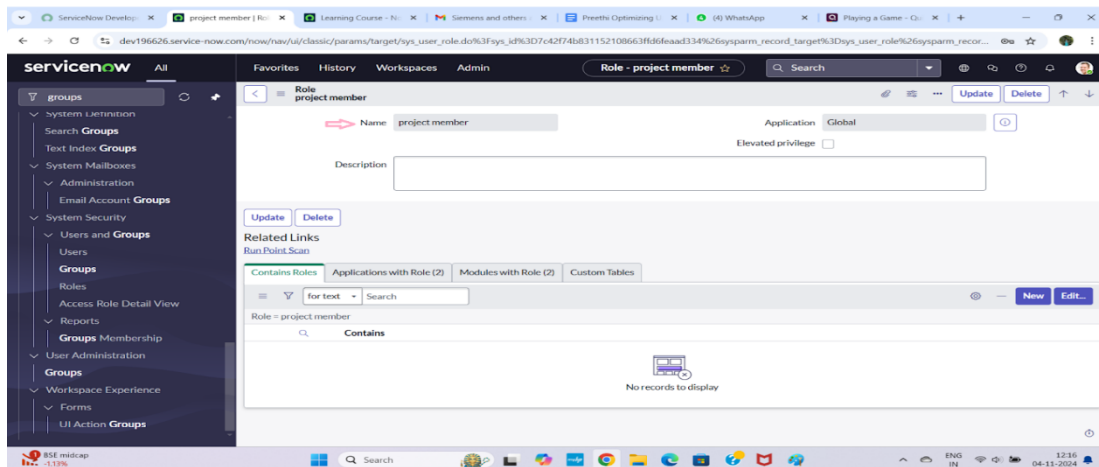
## Create Groups

1. Open service now.
2. Click on All >> search for groups
3. Select groups under system security
4. Click on new
5. Fill the following details to create a new group
6. Click on submit



## Create Roles

1. Open service now.
2. Click on All >> search for roles
3. Select roles under system security
4. Click on new
5. Fill the following details to create a new role
6. Click on submit



## Create one more role:

7. Create another role with the following details
8. Click on submit

## Assign roles to alice user

1. Open servicenow. Click on All >> search for user
2. Select tables under system definition
3. Select the project manager user
4. Under project manager
5. Click on edit
6. Select project member and save
7. click on edit add u\_project\_table role and u\_task\_table role
8. click on save and update the form.

The screenshot shows the ServiceNow user management interface. The user 'alice.p' is selected, and the 'Roles' tab is active. The table below lists the roles assigned to this user.

| Role                 | State  | Inherited | Inheritance Count |
|----------------------|--------|-----------|-------------------|
| u_task_table_2_user  | Active | false     |                   |
| project member       | Active | false     |                   |
| u_project_table_user | Active | false     |                   |

## Assign roles to bob user

1. Open servicenow. Click on All >> search for user
2. Select tables under system definition
3. Select the bob p user
4. Under team member
5. Click on edit
6. Select team member and give table role and save
7. Click on profile icon Impersonate user to bob

The screenshot displays the ServiceNow user management interface for a user named 'Bob p'. The left sidebar shows the navigation menu with categories like 'System Definition', 'System Mailboxes', 'Administration', 'System Security', 'Users and Groups', 'Reports', 'Groups Membership', 'User Administration', 'Workspace Experience', and 'Forms'. The main content area shows the user's profile with options to 'Update', 'Set Password', or 'Delete'. Below this, there are 'Related Links' and a section for 'Entitled Custom Tables' with tabs for 'Roles (2)', 'Groups (1)', 'Delegates', 'Subscriptions', and 'User Client Certificates'. The 'Roles (2)' tab is active, showing a table of roles assigned to the user. The table has columns for 'Role', 'State', 'Inherited', and 'Inheritance Count'. Two roles are listed: 'u\_task\_table\_2\_user' and 'team member', both with an 'Active' state. The 'team member' role is highlighted with a red box.

| Role                | State  | Inherited | Inheritance Count |
|---------------------|--------|-----------|-------------------|
| u_task_table_2_user | Active | false     |                   |
| team member         | Active | false     |                   |

8. We can see the task table2.

## Assign table access to application

1. while creating a table it automatically create a application and module for that table
2. Go to application navigator search for search project table application
3. Click on edit module
4. Give project member roles to that application
5. Search for task table2 and click on edit application.
6. Give the project member and team member role for task table 2 application

The screenshot shows the ServiceNow 'Application Menu - project table' configuration page. The browser tabs include 'Copy of template - Google Doc...', 'project on users, groups, roles, to...', 'ServiceNow Developers', and 'project table | Application Menu...'. The URL is 'dev196626.service-now.com/now/nav/ui/classic/params/target/sys\_app\_application.do%3Fsys\_id%3D9705334f831152108663ffd6feaad362'. The page title is 'Application Menu - project table'. The configuration form includes the following fields and sections:

- Title:** project table
- Application:** Global
- Active:** ☒
- Roles:** project member (with an edit icon)
- Category:** Custom Applications
- Hint:** (empty text box)
- Description:** (empty text box)

At the bottom, there are 'Update' and 'Delete' buttons. A watermark 'Activate Windows Go to Settings to activate Windows.' is visible in the bottom right corner.

servicenow All Favorites History Admin Application Menu - task table 2 Search

Application Menu task table 2

↑ title  Application Global

Active ☒

Restricts access to the specified roles. Otherwise, all users can view the application menu when it is active.

Roles  u\_task\_table\_2\_user, project member, team member

Specifies the [menu category](#), which defines the navigation menu style. The default value is Custom Applications.

Category

The text that appears in a tooltip when a user points to this application menu

Hint

Description

Modules

Activate Windows  
Go to Settings to activate Windows.

## Create ACL

1. Open service now.
2. Click on All >> search for ACL

servicenow All Favorites History Admin Access Control - New Record Search

Access Control New record

Warning: A role, security attribute, data condition, or script is required to properly secure access with this ACL.

\* Type

\* Operation

Decision Type

Application

Active ☒

Advanced ☐

Admin overrides ☒

Protection policy

\* Name

Description

Applies To

Conditions

Access Control Rules have two decision types, and these types will behave differently depending on conditions.

Activate Windows  
Go to Settings to activate Windows.

3. Select Access Control(ACL) under system security
4. Click on elevate role
5. Click on new
6. Fill the following details to create a new ACL
7. Scroll down under requires role
8. Double click on insert a new row
9. Give task table and team member role
10. Click on submit
11. Similarly create 4 acl for the following fields

| Name                         | Decision Type | Operation | Type   | Active | Updated by | Updated             |
|------------------------------|---------------|-----------|--------|--------|------------|---------------------|
| u_leave_request              | Allow If      | delete    | record | true   | admin      | 2024-10-22 02:27:59 |
| u_leave_request              | Allow If      | create    | record | true   | admin      | 2024-10-22 02:27:59 |
| u_task_table                 | Allow If      | read      | record | true   | admin      | 2024-10-22 04:21:28 |
| u_task_table                 | Allow If      | write     | record | true   | admin      | 2024-10-22 04:20:15 |
| u_task_table.u_assigned_to   | Allow If      | write     | record | true   | admin      | 2024-10-22 04:33:53 |
| u_task_table.u_due_date      | Allow If      | write     | record | true   | admin      | 2024-10-22 04:33:14 |
| u_task_table.u_task_id       | Allow If      | write     | record | true   | admin      | 2024-10-22 04:27:47 |
| u_task_table.u_task_name     | Allow If      | write     | record | true   | admin      | 2024-10-22 04:31:14 |
| u_task_table_2               | Allow If      | write     | record | true   | admin      | 2024-10-22 21:05:07 |
| u_task_table_2               | Allow If      | read      | record | true   | admin      | 2024-10-22 21:26:57 |
| u_task_table_2               | Allow If      | read      | record | true   | admin      | 2024-10-22 21:05:07 |
| u_task_table_2               | Allow If      | write     | record | true   | admin      | 2024-10-22 21:28:27 |
| u_task_table_2               | Allow If      | create    | record | true   | admin      | 2024-10-22 21:05:06 |
| u_task_table_2               | Allow If      | delete    | record | true   | admin      | 2024-10-22 21:05:07 |
| u_task_table_2.u_assigned_to | Allow If      | write     | record | true   | admin      | 2024-10-22 21:31:20 |

12. Click on profile on top right side
13. Click on impersonate user
14. Select bob user
15. Go to all and select task table2 in the application menu bar



## 16. Comment and status fields are have the edit access

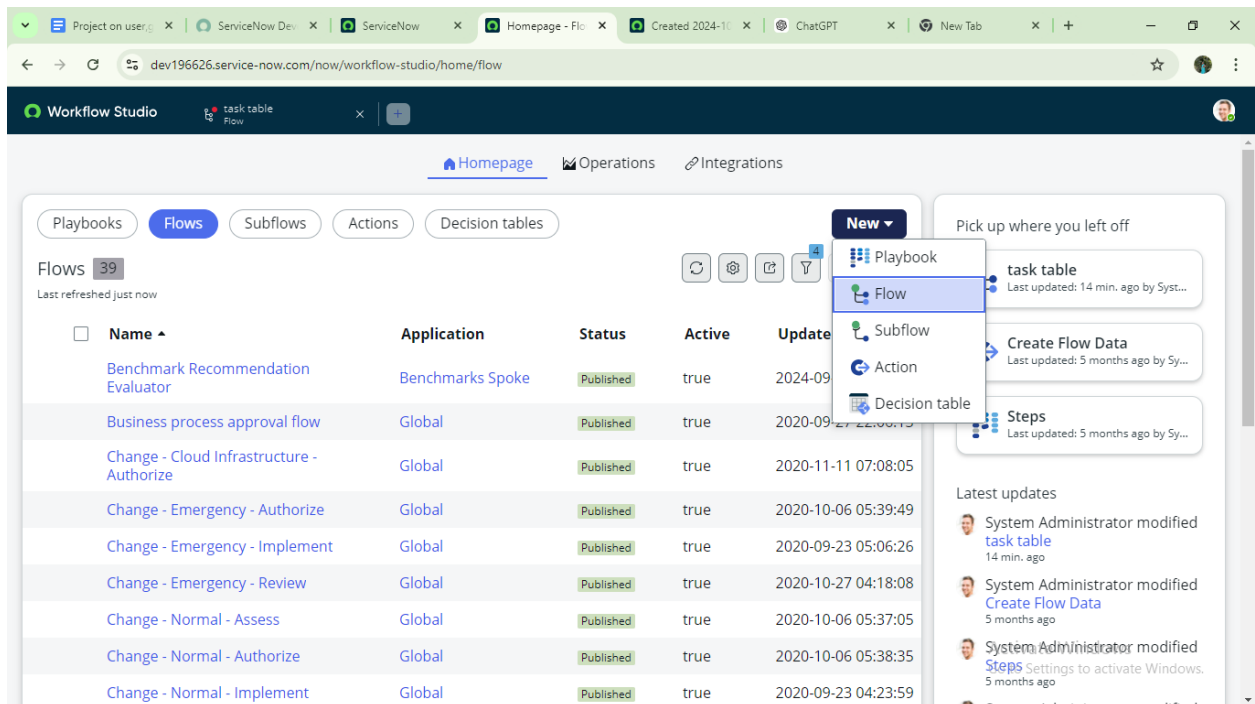
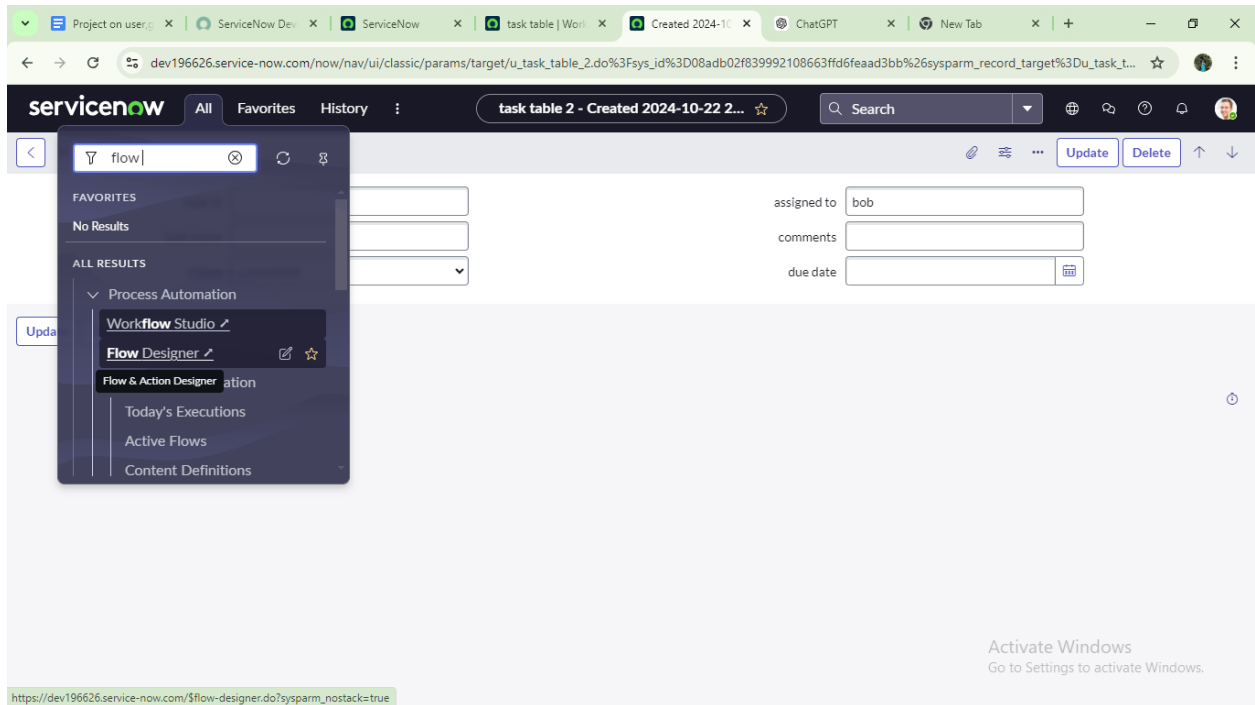
The screenshot shows the ServiceNow interface for creating a new record in 'task table 2'. The browser tabs include 'Copy of template - Google', 'ServiceNow Developers', 'ServiceNow', 'Create Created | task table 2', and 'ChatGPT'. The URL is 'dev196626.service-now.com/now/nav/ui/classic/params/target/u\_task\_table\_2.do%3Fsys\_id%3D-1%26sys\_is\_list%3Dtrue%26sys\_target%3Du\_task\_table\_2%26sysparm\_check...'. The ServiceNow header shows 'All', 'Favorites', 'History', and a 'task table 2 - Create Created' button. The form fields are:

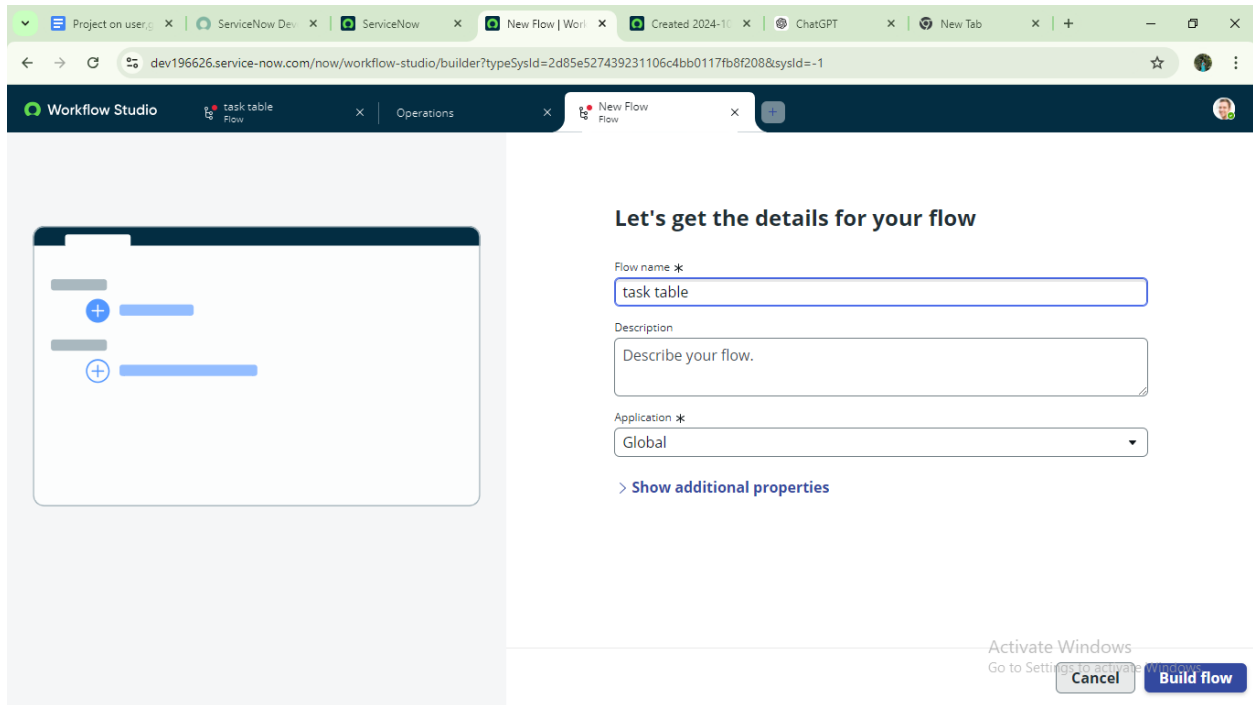
- task id:
- task name:
- status:
- assigned to:
- comments:
- due date:

A 'Submit' button is located at the bottom left of the form area. An 'Activate Windows' watermark is visible in the bottom right corner.

## Create a Flow to Assign operations ticket to group

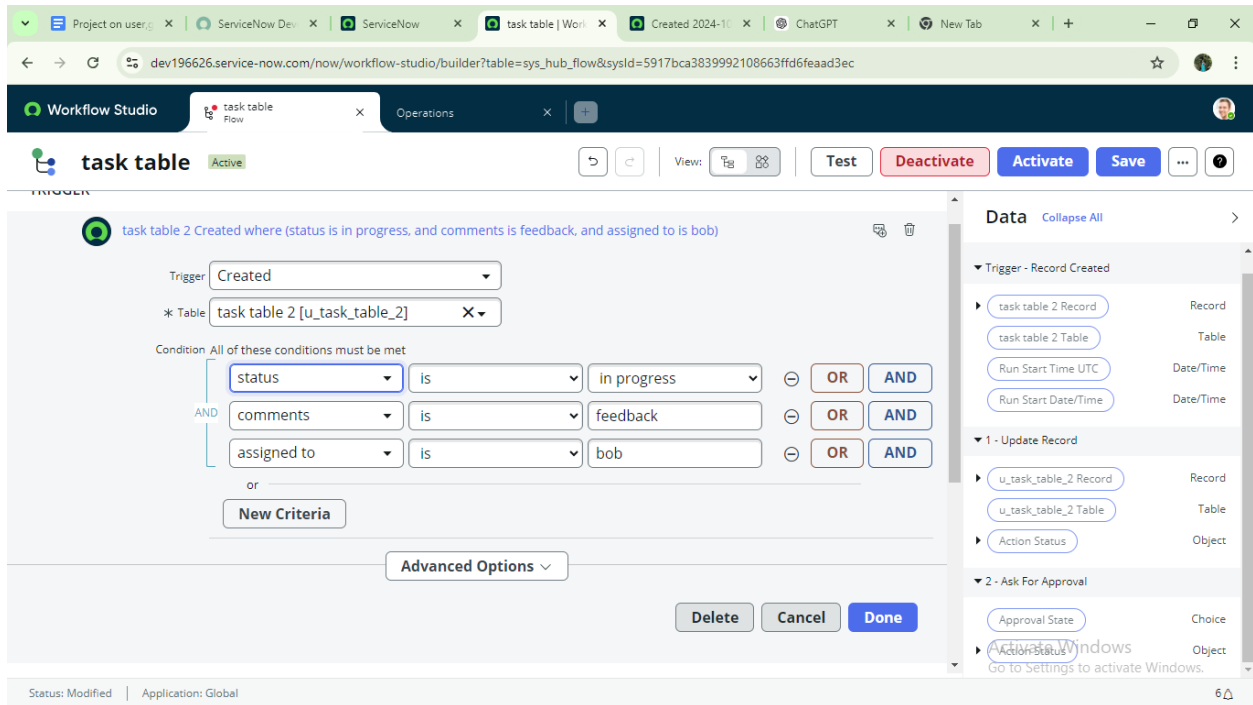
1. Open service now.
2. Click on All >> search for Flow Designer
3. Click on Flow Designer under Process Automation.
4. After opening Flow Designer Click on new and select Flow.
5. Under Flow properties Give Flow Name as “ task table”.
6. Application should be Global.
7. Click build flow.





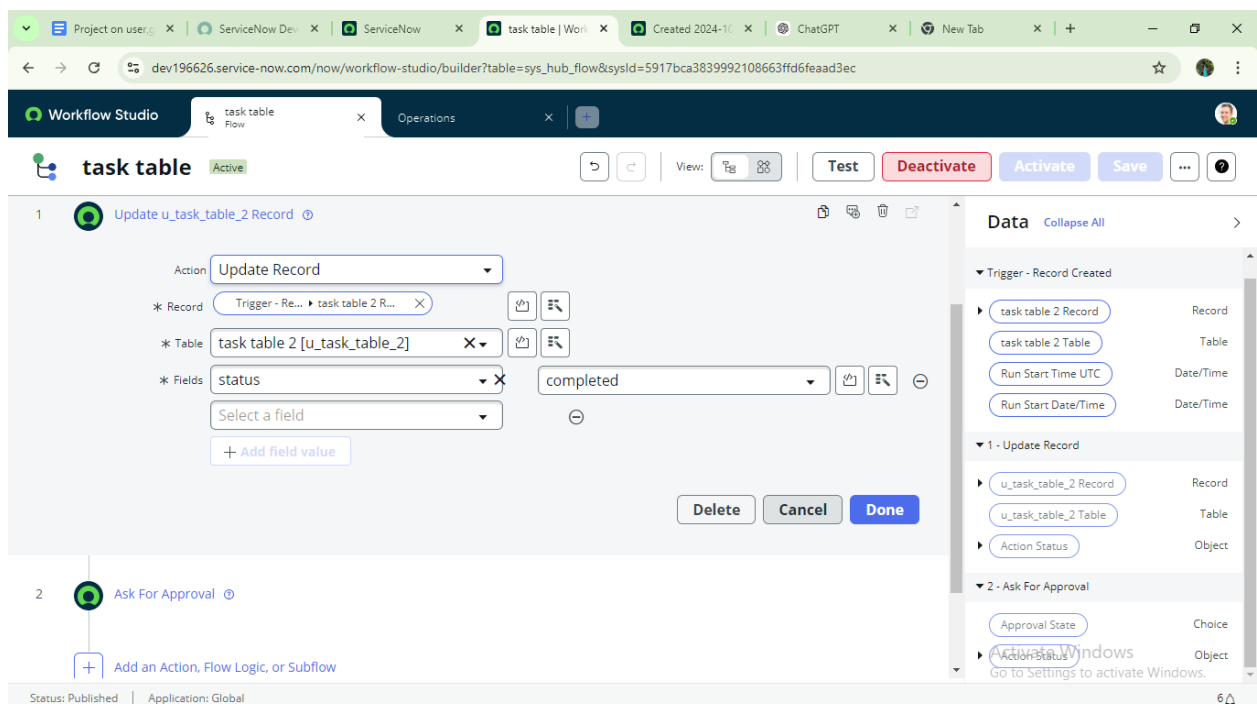
### Next step:

1. Click on Add a trigger
2. Select the trigger in that Search for “create record” and select that.
3. Give the table name as “ task table ”.
4. Give the Condition as Field : status Operator :is Value : in progress  
Field : comments Operator :is Value : feedback  
Field : assigned to Operator :is Value : bob
5. After that click on Done.



## Next step:

1. Click on Add an action.
2. Select action in that ,search for “ update records”.
3. In Record field drag the fields from the data navigation from Right Side(Data pill)



4. Table will be auto assigned after that
5. Add fields as “status” and value as “completed”
6. Click on Done.

### Next step:

1. Now under Actions.
2. Click on Add an action.
3. Select action in that ,search for “ ask for approval ”.
4. In Record field drag the fields from the data navigation from Right side
5. Table will be auto assigned after that
6. Give the approve field as “ status”
7. Give approver as alice p
8. Click on Done.

The screenshot displays the ServiceNow Workflow Studio interface for configuring a workflow. The main workspace shows a sequence of two steps:

1. Update u\_task\_table\_2 Record
2. Ask For Approval

The 'Ask For Approval' step is currently selected and configured with the following details:

- Action:** Ask For Approval
- \* Record:** 1 - Upda... u\_task\_table\_2 R...
- Table:** task table 2 [u\_task\_table\_2]
- Approval Field:** status
- Journal Field:** Select a field
- \* Rules:**
  - Rule 1: Approve. When: All users approve. Approver: alice p.

On the right side, the 'Data' pane is open, showing a hierarchy of data objects available for the workflow:

- Trigger - Record Created
  - task table 2 Record (Record)
  - task table 2 Table (Table)
  - Run Start Time UTC (Date/Time)
  - Run Start Date/Time (Date/Time)
- 1 - Update Record
  - u\_task\_table\_2 Record (Record)
  - u\_task\_table\_2 Table (Table)
  - Action Status (Object)
- 2 - Ask For Approval
  - Approval State (Choice)
  - Action Status (Object)

At the bottom of the interface, there is a status bar indicating 'javascript:void(0) hed | Application: Global' and a page number '6'.

1. Go to application navigator search for task table.
2. It status field is updated to completed

The screenshot shows the ServiceNow interface for a record titled "task table 2 - Created 2024-10-22 22:25:18". The form contains the following fields:

- task id:
- task name:
- status:
- assigned to:
- comments:
- due date:

At the bottom left of the form, there are "Update" and "Delete" buttons. At the bottom right, there is a watermark that says "Activate Windows Go to Settings to activate Windows."

1. Go to application navigator and search for my approval
2. Click on my approval under the service desk.
3. Alice p got approval request then right click on requested then select approved

|                          | State     | Approver          | Comments | Approval for | Created             |
|--------------------------|-----------|-------------------|----------|--------------|---------------------|
| <input type="checkbox"/> | Search    | Search            | Search   | Search       | Search              |
| <input type="checkbox"/> | Approved  | alice p           |          | (empty)      | 2024-10-22 22:26:19 |
| <input type="checkbox"/> | Rejected  | Fred Luddy        |          | (empty)      | 2024-09-01 12:19:33 |
| <input type="checkbox"/> | Requested | Fred Luddy        |          | (empty)      | 2024-09-01 12:17:03 |
| <input type="checkbox"/> | Requested | Fred Luddy        |          | (empty)      | 2024-09-01 12:15:44 |
| <input type="checkbox"/> | Requested | Howard Johnson    |          | CHG0000096   | 2024-09-01 06:15:29 |
| <input type="checkbox"/> | Requested | Ron Kettering     |          | CHG0000096   | 2024-09-01 06:15:29 |
| <input type="checkbox"/> | Requested | Luke Wilson       |          | CHG0000096   | 2024-09-01 06:15:29 |
| <input type="checkbox"/> | Requested | Christen Mitchell |          | CHG0000096   | 2024-09-01 06:15:29 |
| <input type="checkbox"/> | Requested | Bernard Laboy     |          | CHG0000096   | 2024-09-01 06:15:29 |
| <input type="checkbox"/> | Requested | Howard Johnson    |          | CHG0000095   | 2024-09-01 06:15:25 |
| <input type="checkbox"/> | Requested | Ron Kettering     |          | CHG0000095   | 2024-09-01 06:15:25 |
| <input type="checkbox"/> | Requested | Luke Wilson       |          | CHG0000095   | 2024-09-01 06:15:25 |
| <input type="checkbox"/> | Requested | Christen Mitchell |          | CHG0000095   | 2024-09-01 06:15:25 |
| <input type="checkbox"/> | Requested | Bernard Laboy     |          | CHG0000095   | 2024-09-01 06:15:25 |

## Conclusion :

This scenario highlights a structured approach to project management, showcasing the roles of Alice and Bob within a defined workflow. With Alice's oversight and Bob's execution, the team effectively collaborates to ensure project success. The use of tables organizes key information, facilitating easy tracking of projects, tasks, and progress updates. Overall, this system promotes accountability, enhances communication, and leads to the successful completion of projects.